

BACKYARD TRAPPING

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Mist nets have made a substantial contribution to banding in Australia, and the authors are ardent supporters of their use. Since the inception of "The Australian Bird Bander" considerable emphasis has been placed on mist-netting, somewhat to the detriment of other techniques.

The following notes on trapping are intended as an introduction to new banders who may have overlooked the potentialities of traps. Although traps can be made portable and operated in the field, many banders will find their most productive trapping in their own yards. Accordingly emphasis is placed on types of traps considered to be of most use for general trapping of ground-frequenting birds.

Nets and traps each have their own advantages. Nets are extremely mobile and will catch many species not readily taken by other means. Some advantages of traps are:

(1) In Australia generally, traps can be used all year round. Wind, rain, severe cold and heat all adversely affect netting, either by reducing the capture rate or by endangering the well-being of the netted birds. Traps are relatively unaffected by the weather, but naturally care must be taken that trapped birds are not distressed by heat or cold, or become wetted unless drying cages are available.

(2) Traps can be used in one location continuously with little disturbance to the birds frequenting the area. Many birds become quite accustomed to being trapped and handled, and return to the trap time and time again. For example at Riverside, Tasmania, 060.21723, a juvenile male Starling, was trapped and banded 13.11.61 and was retaken 25 times in 13 days up to 6.12.61. A Silvereye, 010.04535 banded at Lane Cove, N.S.W., has been retrapped on 26 separate days in slightly less than four years. Some individuals quickly master maze-type traps, learning to enter and leave the traps at will.

(3) Traps not being operated can (and should) be baited and left open in situ to continue to attract birds. When required the traps can be brought into operation within a few seconds.

(4) If circumstances require it, birds can be released rapidly by opening traps. Netted birds must be individually released and a badly tangled bird may delay an experienced netter just when he is in a hurry.

(5) Traps will take considerable numbers of some species that are not readily netted. (The reverse also applies).

Types of Traps

There is no limit to the variations possible in trap design and construction. The British Trust for Ornithology booklet, "Trapping Methods for Bird Ringers" by P. A. D. Hollom and H. G. Brownlow describes and illustrates many traps. This booklet (3s. 3d. stg.) provides a particularly good introduction to trapping.

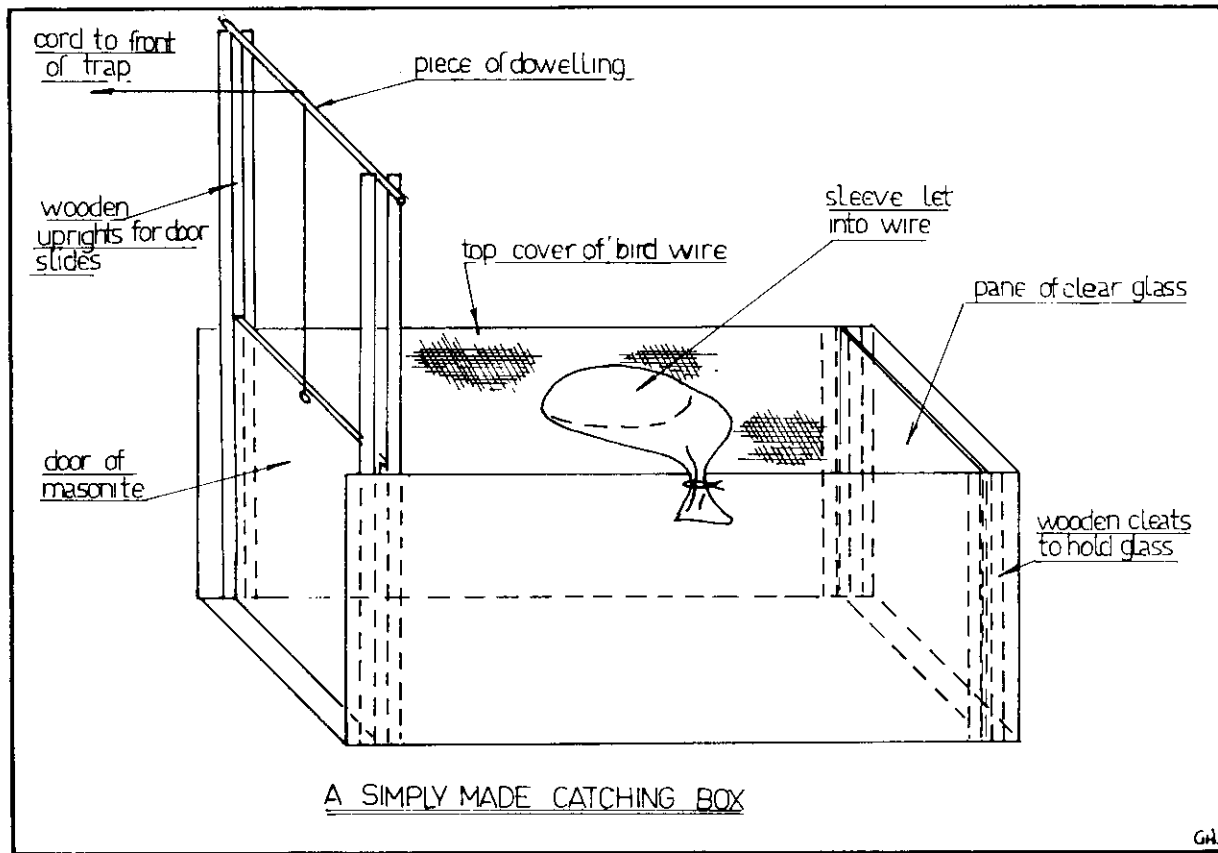
Traps can be divided into three main types, each of which has particular advantages. These are:—

(a) Direct traps, in which the trapping mechanism is operated by the bander when he sees the bird enter the trap.

(b) Maze-type traps, in which the bird enters the trap through a funnel and is unable to find its way out again.

(c) Action-type traps, in which the bird enters the trap through an open door and triggers a mechanism which shuts the door.

Direct and maze-type traps can be relatively simple to construct and both are good general purpose traps for ground-frequenting birds. Action-type traps are more complicated in construction, requiring a trip mechanism that is both delicate and safe for the bird actuating it. Some action-type traps can be made predator proof. Several designs are given in the booklet mentioned above; it is not proposed to discuss them further here.



Direct Traps

The best general purpose trap is the drop trap. This consists essentially of a wire cage; one end is hinged to the roof to make a door through which the birds enter. The door is held open by a stick to which a string is attached. When a bird enters the trap the string is pulled; the door shuts and the bird is trapped.

Suitable dimensions for a trap are 3 ft. wide 18 inches high and about 4 to 6 ft. long; or alternatively 6 ft. wide, 3 ft. high and 9 to 10 ft. long. A good catching box fitted to the trap is invaluable in collecting the birds quickly. With small traps it is usually easy to entice the bird into the catching box; with wider traps this is not as easy and the trap then should be high enough to allow the bander to enter the trap.

The door prop-stick should be hinged so that it collapses readily when the string is pulled; a solid stick will jam occasionally and may not release the door quickly. Trap frames can be of wood or of lengths of 8 or 10 gauge fencing wire. One of us currently operates a drop trap

6 ft. wide, 3 ft. high and about 11 ft. long made up of 17 panels each 3 ft. square of wire netting mounted in a frame of 10 gauge fencing wire. Some of the panels are bent for the back of the trap reducing to the catching box.

Birds taken in this trap include most ground-feeding birds that have frequented the yard. In Riverside, Tasmania, these included many Starlings and House Sparrows (the common garden birds) with lesser numbers of Blackbirds, Spotted Turtle-Doves, Grey Butcher-birds, Silver Gulls, a Spur-winged Plover and a Scarlet robin. In Kingscliff, N.S.W., the same trap has given a steady trickle of Magpies, Grey and Pied Butcher-birds, Spotted Turtle-doves, Pipits, Willie Wagtails, Magpie-larks, Starlings and one Drongo.

Direct traps have a big advantage over other traps in that the bander operates the trap and the trapped bird is released very soon after trapping. Loss through predation is most unlikely. Almost the only way in which a bird can be harmed by a direct trap is to have the door

fall on it. This can be minimised by ensuring that the bird is well inside the trap before dropping the door. The movement of the propstick and the falling door usually makes the bird start further into the trap, particularly if the bird is facing into the trap when it is operated.

The big disadvantage of a direct trap is that it does not operate in the absence of the bander, and an inordinate amount of time can be wasted just looking at birds feeding or resting around a trap but never entering. Accordingly the trap should be sited where it is frequently under observation, for example from a kitchen window. Occasionally a bird will be accidentally trapped; we have had a Spur-winged Plover catch its leg in the string and actuate the trap, catching a sparrow.

Direct or drop traps need not be confined to ground setting; they can be elevated to catch (say) Honeyeaters or Silvereyes in a tree if a bottom is fitted to the trap.

Almost any bird that is attracted to bait can be taken in a direct trap.

Maze-Type Traps

Maze-type traps are efficient for the species for which they are designed. They consist essentially of a wire cage with a number of funnel entrances. Birds enter through the funnels and are unable to find their way out again. While a drop trap will take birds of a wide range of sizes efficiently, maze-type traps are generally designed to take birds of a limited size range. For example a trap to take (say) magpies would have comparatively large diameter funnels, and small birds would tend to escape readily.

Conversely a trap designed for small birds (say Starlings) would not allow large birds, such as magpies, through the funnels. Trap shape and design can vary enormously; size usually increases in proportion to the size of the birds for which it is designed. For example a trap for Silvereyes may be as small as 12 inches cube. Funnel entrances for ground-sited traps are generally on the ground, but top entry funnels are often useful. Traps sited aloft will probably have funnels sited about the middle of the sides and in the top; with perches placed adjacent to the funnel entrances. A reasonable sized, ground sited maze trap might be about 3 ft. wide, 18 inches high and about 6 ft. long, with one funnel in the end, and two or three down each side.

In Riverside, Tasmania a trap of these dimensions with 7 funnels (6 inch entrance, 3 inch outlet) primarily designed for Starlings took

many Starlings and Sparrows, with lesser numbers of Blackbirds, Silvereyes, Yellow-tailed Thornbills, Grey Butcher-birds, Blue Wrens, Spotted Turtle-doves and Scarlet Robins.

Maze traps have an advantage over direct traps in that they continue to operate in the absence of the bander. For the well-being of the trapped birds, maze traps should not be left unobserved for more than 20 to 30 minutes, depending upon the weather and the prevalence of predators. Loss through predation, particularly by cats, could be expected if traps are not continually checked. Trapped birds may also injure themselves by abrading their foreheads, or occasionally by beating the elbows of their wings on the wire netting.

Accordingly trapped birds should be removed as soon after trapping as is practicable. Apart from the prospect of injury or loss through predation, birds left in a maze-type trap for any length of time often find their way out again. This can be made more difficult by making the trap higher, by providing perches, and by fitting a second or holding compartment to the trap.

For ground feeding birds it is best to site the trap near, but not under, a tree about 10 to 12 ft. high. Many birds will fly into the tree, inspect the trap and bait, and then drop down near the trap to feed. If possible the trap entrances should face the tree.

Maze traps operate efficiently when sited aloft. At Lane Cove, N.S.W. two maze traps have been used, one ground sited and one elevated about 6 ft.; both traps are equally efficient in trapping Silvereyes.

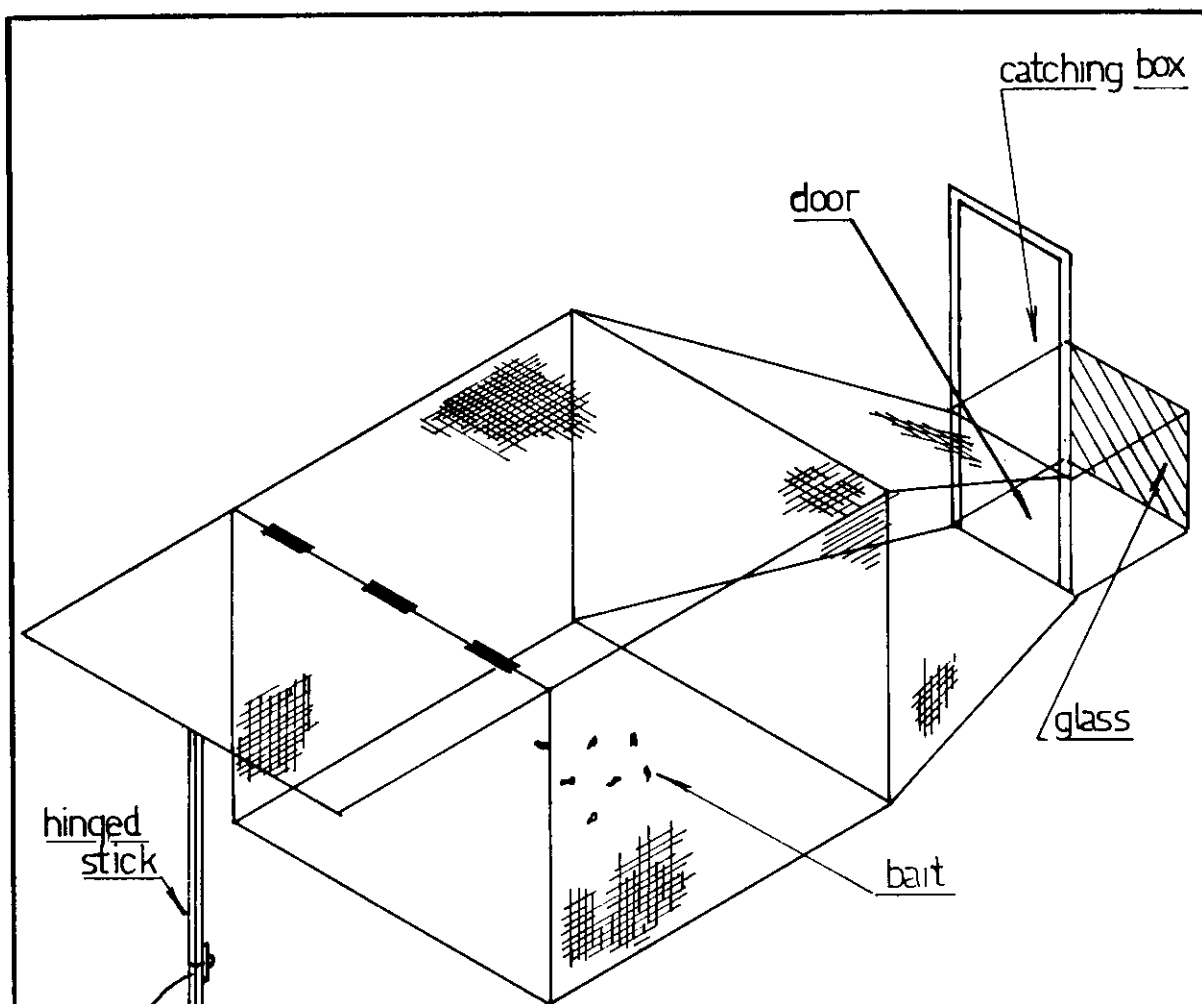
Combination Traps

It is, of course, possible to use a trap as a combination trap by adding a series of funnels to the sides of a drop trap. The door can be propped and the trap used as a drop trap, or the door can be secured and the trap used as a maze trap. It is useful to use such a trap overnight; the trap can be set as a drop trap overnight, so that birds feed on the bait in the early morning while the bander is in bed.

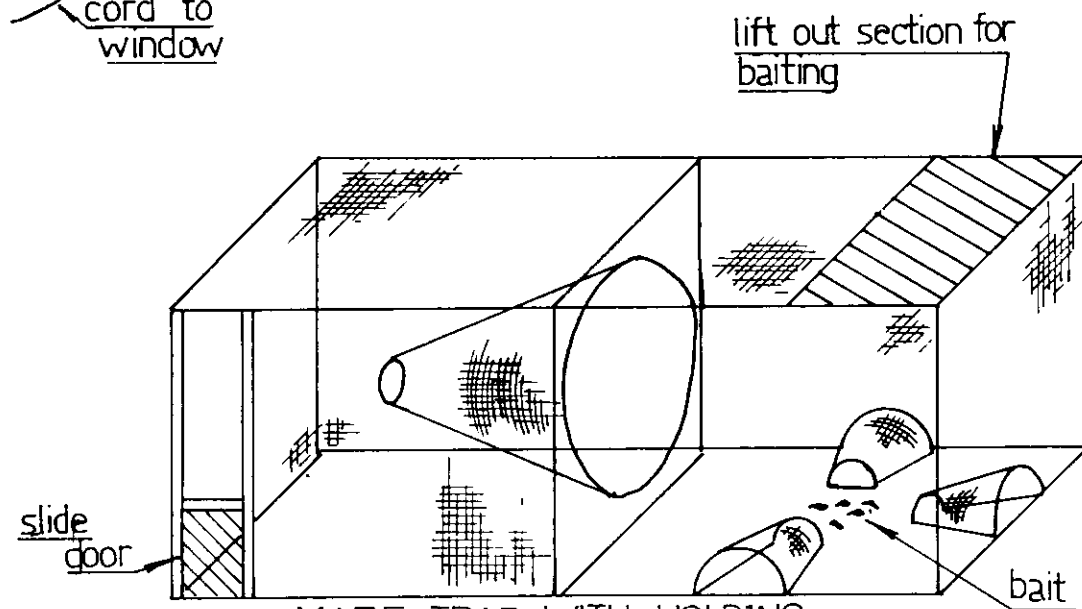
When he rises he can use the trap as a drop trap initially or set it as a maze trap. A maze trap unattended in the early morning is an invitation to predators as they, like birds, are most active and hungry in the early morning.

Catching Boxes

Birds can be removed from small traps simply by fitting a small door (or better still by fitting a sleeve) to the trap. Provided one's hand can reach to any part of the trap, the birds are



SIMPLE DROP TRAP



MAZE TRAP WITH HOLDING COMPARTMENT FOR SMALL BIRDS

easily removed. For larger traps a good catching box is invaluable. A catching box used by one of us is sketched elsewhere. This box is simply constructed and is effective.

The catching box consists of a wooden box, perhaps 18 inches long and about 12 inches wide and high. The top and the two ends of the box are removed. A sliding door in a guillotine frame is fitted to the front of the box. A panel of clear glass is fitted to the rear of the box. The top is covered with a piece of bird wire in which a hole 6 inches in diameter has been cut.

A sleeve (leg of an old slacks is ideal) is sewed around the periphery of the hole. A string to the top of the sliding door passes over the top of the guillotine frame, to the front of the trap. When a bird is trapped the bander pulls the string from the front of the trap; the catching box door opens and the bird sees through the clear glass and nearly always quickly enters the catching box. The door is then lowered and the bird removed via the sleeve.

Cost of Traps

A direct trap 3 ft. wide, 18 inches high and 6 ft. long will require 5 yards of netting 3 ft. wide. A maze trap of similar dimensions with 6 or 7 funnels will require about 7 yards of netting. Small mesh netting is about three shillings per yard, and the netting for the above traps would cost about 15 and 21 shillings respectively.

If larger mesh netting is used, this cost will be reduced but some smaller birds will escape through the netting. Trap frames can generally be made from scraps of timber or wire. Many years of use can be expected from a well made trap. Cost of a piece of glass for the back of a catching box would be about two shillings.

Bait

Bread and other kitchen scraps are good general bait for most ground feeding birds. Meat and fish scraps are readily taken by many species, but also attract cats and dogs. Water dripping into an inconspicuous container also attracts many birds. Bait will naturally vary considerably with the species of birds concerned, from syrup for honeyeaters, to grain for pigeons and parrots. We once took a Scarlet Robin by gradually moving a bird bath closer and closer and eventually into the trap; he was eventually caught more or less with his pants down in the bath.

Birds Trapped

The tabulation below lists birds taken in traps and banded in a suburban back-yard at River-

side, Tasmania. Between ~~one~~ and three traps of several designs were in use between August, 1960, and April, 1963. The list gives a reasonable summary of the abundance of ground frequenting birds in the yard; the predominance of introduced species will be noted.

Species	Number of birds trapped and banded
House Sparrow	720
Starling	636
Blackbird	54
Eastern Silvereye	16
Spotted Turtle-dove	12
Yellow-tailed Thornbill	12
Silver Gull	11
Grey Butcher-bird	3
Scarlet Robin	2
Blue Wren	2
Yellow-throated Honeyeater	1
Spur-winged Plover	1
Total: 12 species	1470

The second tabulation lists birds taken in traps and banded in a suburban back-yard at Lane Cove, N.S.W. Two maze traps (one ground sited and one elevated 6 ft.) were used between July, 1958, and June, 1964.

Species	Number of birds trapped and banded
Eastern Silvereye	863
House Sparrow	128
Red-whiskered Bulbul	100
Spotted Turtle-dove	73
Blue Wren	40
Yellow-faced Honeyeater	26
Starling	20
Red-browed Finch	33
Magpie-lark	5
Southern Yellow Robin	2
Grey Thrush	1
Red Wattle-bird	1
Spice Finch	1
Total: 13 species	1293

The figures shown in the tabulations are for new birds and do not include retrappings.

Queries

If any bander has queries concerning construction or operation of traps similar to those described in these notes, please communicate with either author; they will endeavour to help.

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